#### Using NILS GeoCommunicator to Access Renewable Energy Records

The Land and Mineral Use Records interactive map is available through the NILS GeoCommunicator website (<a href="www.geocommunicator.gov">www.geocommunicator.gov</a>) and contains information from the BLM's National Integrated Land System (NILS) with access to the BLM's Legacy Rehost System - LR2000 (<a href="www.blm.gov/lr2000">www.blm.gov/lr2000</a>). The following instructions will guide you through an interactive web mapping session where you can search for Renewable Energy data and integrate it with other spatial reference themes.



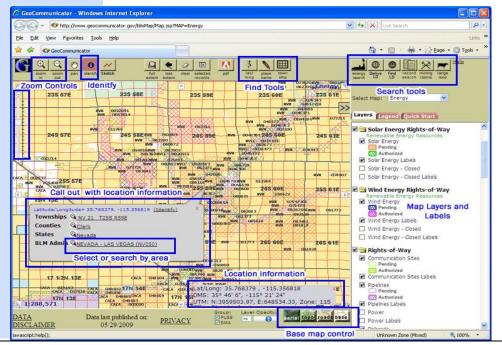
Connect to the GeoCommunicator website at <a href="http://www.geocommunicator.gov">http://www.geocommunicator.gov</a>. Use Internet Explorer as your browser. Pop-Ups must be allowed. Note: ROWs are shown on the map by their legal description and not by a center-line. Not all ROW data is in GeoCommunicator.

Click **"Energy Map"** from home page or from the Interactive Maps.

The Energy Viewer offers the capability to search, access, and dynamically map data from NILS and provides links to BLM's LR2000 System for reports.

#### www.geocommunicator.gov

The image below shows the general features of the map interface. Open the ROW, Wind, or Solar folder under the **layers** tab and select the map layers and labels to display on the map. The map layers in light gray are not active at the current map display. Zooming in/out will activate/deactivate the map layers. The window below shows the tools available within NILS GeoCommunicator.

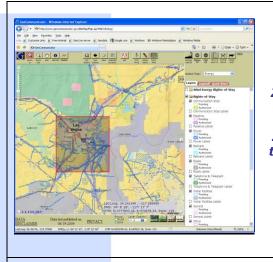


Open the map layer folders to see the data layers that can be displayed.

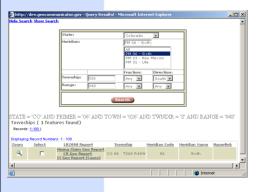
Click on and off map layers and labels to display on the map.

Click the folder to display the selected layers on the map.

Toggle on/off the base maps using the controls at the bottom of the map.



Zooming into
Las Vegas
using the
Zoom In tool
to draw a box
around the
area



Township Search with results

#### SEARCH For Rights-of-Way 5-ways

#### 1-Search using Map tools

Click "**Zoom In**" from the menu bar, then click (hold) and drag a box on the map where you want to zoom in to. You can also use the scroll bar on the left or your mouse wheel. **-OR-**

#### 2-Search using Place Name



Click on "Place Name" from the menu bar, and enter the name of a place, such as a city, state, county, etc. A list of place names is

returned. Click on the appropriate name in the list to zoom to your area of interest.

#### 3-Search using Township Search



Click Township and enter State, Meridian, Township, Range. From the search results select zoom to go to the location. For a list of all ROW

cases in the township, select **LR2000 CR Geo Report**. See Run LR2000 Reports below for more info. -*OR*-

# Decimal Degrees Latitude: 39.659008 Longitude: -116.215184 Copy Degrees/Minutes/Seconds Latitude: Degrees: 39 Minutes: 39 Seconds: 32 Month Manutes: 12 Seconds: 54 Month Manutes: 12 Month Manutes

Lat/long Search

### 4-Search using Latitude/Longitude Search



Click on "lat/long Search" from the menu bar. Enter lat/long in decimal degrees, degrees/min/sec, or UTM.

#### 5-Search using Case Record Search



Click on "Record Search" from the menu bar. A new Case Record Search window will appear. Select Wind Energy from the scroll bar.

Search for a Wind or other BLM energy authorization by Serial Number and/or Case ID.

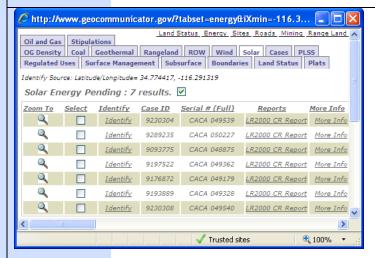
A partial serial number may be entered in either the alpha or numerical field. For example, enter WY in the Serial Number (Alpha) field and click "**Search**".



Search for Wind Energy in WY



Wind Energy Search Results



Identify Window – Showing Solar Record Information

#### **SEARCH RESULTS**

All of the wind energy cases that meet your search criteria will be displayed in the search results. Click in the "Select" box to highlight the parcel on the map or select "Zoom" to go to the parcel on the map.

Click "LR2000 Report" to get an up-to-date serial register report of the case directly from the BLM LR2000 Reporting System.

#### **Identify Rights-of-Way Parcels**



The "**Identify**" button is used to display record information about a parcel on the map. Click the

"Identify" button and then click on the parcel on the map. From the Identify Window click on the tabs for record data including Geothermal, Solar & Wind Energy, O&G, Surface Management Agency, PLSS (T/R/S) and Cases.

To highlight the parcel on the map, check the "Select" box next to the record. Click "Zoom" to go to the record you want to display on the map. The data in the Identify Window is a subset of data in LR2000. A 'Y' in the Partial Geometry field means not all of the lands were mapped.

For **up-to-date** information on the parcel, select "**LR2000**" from the **Identify Window** to get a serial register page directly from the BLM's LR2000 Reporting System. Select "**More Info**" to get just the customer information. Select "**Identify**" to use the **boundary of the case** as your search area. This is a **very powerful search** that will bring up a new Identify Window with results based on what is happening within and touching the area of the case. This is a great way to research what is happening in the area of a parcel.

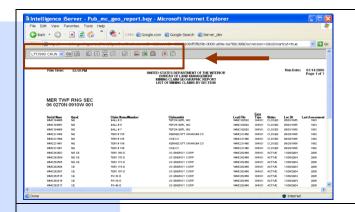


Identify Window - showing information under the PLSS tab including links to TWP CR GeoReport

# Run LR2000 Reports - Find Energy cases that aren't being displayed

Under the **PLSS tab** you can get a **LR2000 CR Geographic Report**. Click on the link to launch a live report from the LR2000 reporting system. This report will display the active and closed cases by serial number that occur within the township.

This will help you to find all of the missing cases occurring on a piece of land even though they are not displayed on the map.



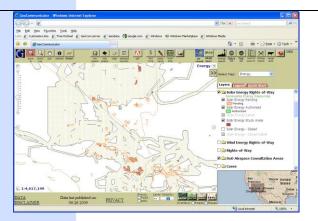
#### LR2000 Reports

Use the controls at the top of the LR2000 report to view all of the pages in the report or to export the data to an excel spreadsheet.

You can also get LR2000 reports directly from the LR2000 Reporting System at: <a href="http://www.blm.gov/lr2000">http://www.blm.gov/lr2000</a>, select Reports from the menu bar.

# Determine information about the area by turning on Base Maps, Reference Themes, and other data layers.

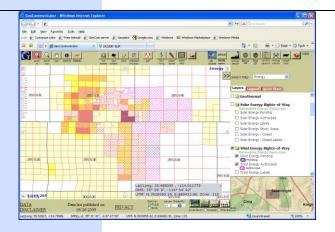
Turn on base maps such as PLSS for land descriptions, SMA for what agency is managing the surface of the lands, aerial imagery, and topo maps. Additional reference themes can be found in the Reference folder.



Solar Energy Project Areas, pending and authorized solar energy, and the DoD Airspace Consultation Areas

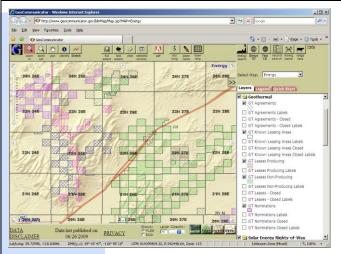
**DoD Airspace Consultation Areas -** The data layer called "DoD Airspace Consultation Areas" is an important data layer for wind, solar and communication site development. If a proposed site occurs in this area, consultation with the Dept. of Defense may be required.

**Solar Energy Study Areas** as shown in the Solar Energy Programmatic EIS are located under the solar energy layers.

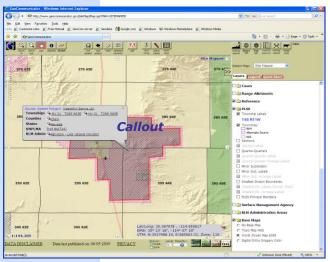


Mining Claim density mapping with wind energy development

Mining Claim (MC) Density - Determine where there could be mining claims within an area that could affect the development and placement of wind or solar energy or other activities in the area. To the left is a screen shot of an authorized wind energy case showing some of the areas with heavy mining claim activities in red, gold, and yellow. The MC density can be shown at the township, section, or quarter level. The MC density information is coming directly from LR2000 and includes MCs that may not be in GeoCommunicator.



Map of Northern Nevada showing geothermal, wind and solar energy areas



Wind Energy Case near Las Vegas, Nevada

After the sketch has finished, a **Callout** will appear on the map and an **Identify Window** will pop-up as shown below. From the **Identify Window** click on the **tabs** to find out what is going on in the area. The maximum number of records displayed under any tab category –such as Active Mining Claims is 100. If there are more than 100 records there will be a button called '**See All Results**'. Click the button to see the complete list of cases.

The Identify window shows there are 425 active mining claims within the wind energy area. For information about the mining claims click in the 'Select Box' to highlight it on the map, click the 'LR2000 Report' link to get a serial register page, or click on 'More Info' to see the list of claimants.

# Find where there are geothermal, wind and solar ROWs in the same area:

Screen shot showing geothermal known leasing areas, producing/non-producing leases, and nominations. This map also shows wind and solar pending and authorized ROWs.

Users are also able to find pending wind energy applications that are overlapping multiple pending solar applications. Use the Identify to highlight the parcels on the map and get details about the parcels. The Application Date for solar in the Identify Window shows who was first to apply. ROW power-lines, roads, and communication sites issued by the BLM are also shown is the area.

## Find out what is going on in the area of the energy application

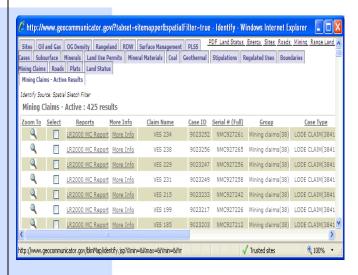
This is a screen shot of the Site Mapper Viewer (Energy Viewer can be used as well) showing a wind energy case in the Las Vegas area. To determine what else is going on in the area that might have a potential influence on development use the **Sketch Tool** to draw a box just inside the boundary of the parcel. To use the sketch tool, click the **Sketch** tool first to activate it and then click on the map to start your box. Continue to click around the parcel **clockwise just inside the boundary.** To end the drawing double click the last point to finish the polygon but **don't** have the last point on top of the first point.

#### **Powerful Searching**

Use the **Callout** for additional record searching. On the **Callout**, click the name '**NEVADA** – **Las Vegas**' next to BLM Admin Area to search for information that occurs within BLM Las Vegas office boundary. To search by County click the **County** name or click the **Township** to search the Township. Click **Identify** next to any record to see by record information.

# To capture the list of Serial Numbers and retrieve the serial register pages

If you wanted to get a serial register page for all of the claims in the area you could copy the serial numbers from the Identify Window and paste them into an Excel spreadsheet. Your goal is to get just a list of mining claim serial numbers with a



Identify window showing active mining claims in the area

comma after each serial number. Copy this list.

Open up the BLM's LR2000 system (http://www.blm.gov/lr2000), click Reports> PUB MC Serial Register Page. Paste the list of serial numbers into the serial number field and run the report. When the results are returned save the file to PDF for a complete listing of all the serial register pages.

#### **For GIS Users**

If you have GIS software you can use GeoCommunicator's wind & solar energy, geothermal or any of GeoCommunicator's many map services (image and feature) within your local GIS. This allows you to bring in your own data sets to create customized maps or export the data in different formats. For detailed information on using the map services refer to the 'Map and Data Services' section on GeoCommunicator.

#### Data Disclaimer

The graphical display of land and mineral parcels and mining claims are NOT a substitute for the official BLM record. Most of the cases from the BLM's National Integrated Land System and the BLM's Legacy Rehost LR2000 (LR2000) are displayed in GeoCommunicator, although not all. Approximately 80-85 % of the LR2000 records are in NILS GeoCommunicator. Therefore, there are land and mineral records and mining claims issued or recorded by the BLM and maintained in LR2000 or other systems that occur on the land but are not in NILS GeoCommunicator and therefore do not show up on the map. Please refer to the LR2000 reports (http://www.blm.gov/lr2000) for a more complete list of land and mineral records and mining claims. Unpatented mining claims are generally 'nominally' recorded to the quarter section. The actual location of the mining claim is somewhere in the mapped area. See GeoCommunicator's "What's New", "About", or "Reference" sections for more information.

Many of our map layers include data from other agencies including abandoned mines, surface management agency boundaries, USFS range allotments and regulated uses, Topo maps, imagery, lakes, rivers, streams, etc. The USDOI does not control the relevance, timeliness, or accuracy of information provided by other agencies, and therefore, provides no warranty, expressed or implied, as to the accuracy, reliability or completeness of furnished data. For additional information regarding abandoned mine activities, please contact the Land Management Agency responsible for the public lands where the mine is located.

The data on GeoCommunicator can be used for information, mapping, graphics, and planning purposes only. Although this data is made available by the BLM, no warranty, expressed or implied, including accuracy, relevancy, timeliness, utility, or completeness of the data and information is made by the BLM, nor shall the act of distribution constitute any such warranty for individual or aggregate data use with other data. The BLM shall not be held liable for improper use of the data described and/or contained herein. By using this data you hereby agree to these conditions. The BLM survey data is intended for mapping purposes only and is not a substitute for an official land survey.

Additional resources can be found on the BLM State Office websites (<a href="http://www.blm.gov">http://www.blm.gov</a>), the GLO website (<a href="http://www.blm.gov">http://www.blm.gov</a>) or by visiting the BLM public rooms.

For more information please visit <a href="http://www.geocommunicator.gov">http://www.geocommunicator.gov</a>.

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